- (b) Installation. (1) Tanks containing fuel for emergency lighting units shall be located on an open deck or in an adequately ventilated metal compartment. No tank shall be located in a compartment where the temperature may exceed 150  $^{\circ}$ F.
- (2) When cylindrical tanks are installed, longitudinal seams shall be located as near the top of the tank as possible. Fuel tanks shall be located in, or as close as practicable, to the machinery space which is served.
- (3) Fuel tanks shall be so installed as to permit examination, testing, or removal for cleaning.
- (4) Fuel tanks shall be adequately supported and braced to prevent movement. Portable tanks are not permitted.
- (5) All fuel tanks shall be electrically bonded to the common ground.
- (c) Tests. (1) Prior to installation, tanks vented to the atmosphere shall be tested to and must withstand a pressure of 5 pounds per square inch or 1½ times the maximum head to which they may be subjected in service, whichever is greater. A standpipe of 11½ feet in height attached to the tank may be filled with water to accomplish the 5 pounds per square inch test. Permanent deformation of the tank will not be cause for rejection unless accompanied by leakage.
- (2) After installation of the fuel tank on a vessel the complete installation shall be tested in the presence of a marine inspector to a head not less than that to which the tank may be subjected in service. Fuel may be used as a testing medium.
- (3) All tanks not vented to atmosphere shall be constructed and tested in accordance with part 54 of this subchapter.

[CGFR 68-82, 33 FR 18878, Dec. 18, 1968, as amended by CGFR 69-127, 35 FR 9980, June 17, 1970; CGFR 72-59R, 37 FR 6190, Mar. 25, 1972]

## §58.50-15 Alternate material for construction of independent fuel tanks.

(a) Materials other than those specifically listed in Table 58.50-5(a) and in Table 58.50-10(a) may be used for fuel tank construction only if the tank as constructed meets the testing requirements of Marine Department, Underwriters' Laboratories, Inc. (formerly

Yacht Safety Bureau) STD E-3, paragraph E3-3. Testing may be accomplished by any acceptable laboratory, such as the Marine Department, Underwriters' Laboratories, Inc. (formerly Yacht Safety Bureau), or may be done by the fabricator if witnessed by a marine inspector.

(b) [Reserved]

[CGFR 68-82, 33 FR 18878, Dec. 18, 1968, as amended by CGFR 69-127, 35 FR 9980, June 17, 1970]

### Subpart 58.60—Industrial Systems and Components on Mobile Offshore Drilling Units (MODU)

SOURCE: CGD 73-251, 43 FR 56801, Dec. 4, 1978, unless otherwise noted.

#### § 58.60-1 Applicability.

This subpart applies to the following industrial systems on board a mobile offshore drilling unit (MODU):

- (a) Cementing systems.
- (b) Circulation systems, including—
- (1) Pipes and pumps for mud;
- (2) Shale shakers;
- (3) Desanders; and
- (4) Degassers.
- (c) Blow out preventor control systems.
- (d) Riser and guideline tensioning systems.
- (e) Motion compensation systems.
- (f) Bulk material storage and handling systems.
- $\left(g\right)$  Other pressurized systems designed for the MODU's industrial operations.

### § 58.60-2 Alternatives and substitutions.

- (a) The Coast Guard may accept substitutes for fittings, material, apparatus, equipment, arrangements, calculations, and tests required in this subpart if the substitute provides an equivalent level of safety.
- (b) In any case where it is shown to the satisfaction of the Commandant that the use of any particular equipment, apparatus, arrangment, or test is unreasonable or impracticable, the Commandant may permit the use of alternate equipment, apparatus, arrangement, or test to such an extent and upon such condition as will insure, to

#### § 58.60-3

his satisfaction, a degree of safety consistent with the minimum standards set forth in this subpart.

#### §58.60-3 Pressure vessel.

A pressure vessel that is a component in an industrial system under this subpart must meet the applicable requirements in §54.01–5 of this chapter.

[CGD 73-251, 43 FR 58601, Dec. 4, 1978, as amended by CGD 77-147, 47 FR 21811, May 20, 1982]

#### §58.60-5 Industrial systems: Locations.

An industrial system under this subpart must not be in a space that is—

- (a) Concealed; or
- (b) Inaccessible to industrial personnel.

### §58.60-7 Industrial systems: Piping.

The piping for industrial systems under this subpart must meet ANSI B31.3, except that blow out preventor control systems must also meet API RP 53.

[CGD 88-032, 56 FR 35824, July 29, 1991]

#### §58.60-9 Industrial systems: Design.

Each system under this subpart must be designed and analyzed in accordance with the principles of API RP 14C.

[CGD 88-032, 56 FR 35824, July 29, 1991]

## §58.60-11 Analyses, plans, diagrams and specifications: Submission.

- (a) Each industrial system must be analyzed by a registered professional engineer to certify that the system has been designed in accordance with applicable standards.
  - (b) The certification must-
- (1) Appear on all diagrams and analyses; and
- (2) Be submitted under  $\S 50.20-5$  of this chapter.
- (c) Standards or specifications for non-pressurized, mechanical or structural systems, and components such as derricks, drawworks, and rotary tables which comply with standards or specifications not referenced in this subchapter must be referenced on the plans or in the specifications of the unit.

#### §58.60-13 Inspection.

An industrial system is accepted by the Coast Guard if the inspector finds—

- (a) The system meets this subpart;
- (b) There are guards, shields, insulation or similar devices for protection of personnel; and
- (c) The system is not manifestly unsafe.

### PART 59—REPAIRS TO BOILERS, PRESSURE VESSELS AND APPUR-TENANCES

#### Subpart 59.01—General Requirements

#### Sec.

- 59.01-1 Scope.
- 59.01-2 Incorporation by reference.
- 59.01-3 Adoption of the ASME Code.
- 59.01-5 Repairs, replacements, or alterations.

## Subpart 59.10—Welding Repairs to Boilers and Pressure Vessels in Service

- 59.10-1 Scope.
- 59.10-5 Cracks.
- 59.10-10 Corroded surfaces.
- 59.10-15 Rivets and staybolts.
- 59.10-20 Patches in shells and tube sheets.
- 59.10-25 Stayed areas.
- 59.10-30 Seal welding.
- 59.10-35 Wrapper plates and back heads.

## Subpart 59.15—Miscellaneous Boiler Repairs

- 59.15-1 Furnace repairs.
- 59.15–5 Stayed furnaces and combustion chambers.
- 59.15–10 Bagged or blistered shell plates.

## Subpart 59.20—Welding Repairs to Castings

59.20-1 Carbon-steel or alloy-steel castings.

AUTHORITY: 46 U.S.C. 3306, 3703; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 227; 49 CFR 1.46.

SOURCE: CGFR 68-82, 33 FR 18887, Dec. 18, 1968, unless otherwise noted.

# Subpart 59.01—General Requirements

### §59.01-1 Scope.

The regulations in this part apply to the repairs of all boilers, appurtenances and pressure vessels subject to inspection by the Coast Guard.